a second polarizing element for converting a ray of light combined by said second polarizing member into linearly polarized light,

wherein said first polarizing member and said second polarizing member are disposed at positions different from each other in a path of rays from said illumination source to said second polarizing element,

wherein at least one polarizing member of said first polarizing member and said second polarizing member possesses a position of localized fringes at which said two linearly polarized components intersect with each other, and

wherein either one of said first polarizing member and said second polarizing member is configured so that a distance therefrom to said position of localized fringes is variable.

2. (Amended) A differential interference optical system according to claim 1, wherein an angle made by a normal to a surface of said at least one polarizing member with an optical axis of said differential interference optical system is changed and thereby said distance from said at least one polarizing member to said position of localized fringes can be changed.

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5. (Amended) A differential interference optical system comprising:

an illumination source;

a first polarizing element for converting a ray of light emitted from said illumination source into linearly polarized light;

a first polarizing member for separating said linearly polarized light converted by said first polarizing element into two linearly polarized components which vibrate perpendicular to each other and travel at a slight separation angle;

a lens system for illuminating and observing an object to be observed;

a second polarizing member for combining said two linearly polarized components on an identical path after passing through said lens system; and

a second polarizing element for converting a ray of light combined by said second polarizing member into linearly polarized light,

wherein at least one polarizing member of said first polarizing member and said second polarizing member possesses a position of localized fringes at which said two linearly polarized components intersect with each other, and a distance from said at least one polarizing member to said position of localized fringes is variable,

wherein an angle made by a normal to a surface of said at least one polarizing member with an optical axis of said differential interference optical system is changed and thereby said distance from said at least one polarizing member to said position of localized fringes can be changed, and

wherein an angle made by said normal to said surface of said at least one polarizing member with said optical axis of said differential interference optical system is changed, and said at least one polarizing member is moved in a direction perpendicular to said optical axis of said differential interference optical system.

7. (Amended) A differential interference optical system comprising:

an illumination source;

a first polarizing element for converting a ray of light emitted from said illumination source into linearly polarized light;

a first polarizing member for separating said linearly polarized light converted by said first polarizing element into two linearly polarized components which vibrate perpendicular to each other and travel at a slight separation angle;

a lens system for illuminating and observing an object to be observed;

a second polarizing member for combining said two linearly polarized components on an identical path after passing through said lens system; and

a second polarizing element for converting a ray of light combined by said second polarizing member into linearly polarized light,

wherein at least one polarizing member of said first polarizing member and said second polarizing member possesses a position of localized fringes at which said two linearly polarized components intersect with each other, and a distance from said at least one polarizing member to said position of localized fringes is variable,

wherein an angle made by a normal to a surface of said at least one polarizing member with an optical axis of said differential interference optical system is changed and thereby said distance from said at least one polarizing member to said position of localized fringes can be changed,

wherein said first polarizing member or said second polarizing member is a Wollaston prism or a Nomarski prism, and

wherein one of said Wollaston prism and said Nomarski prism is constructed to satisfy the following condition:

$$|\Delta\theta| \times d < 12$$

where d is a thickness of said prism, in millimeters, and $\Delta\theta$ is a variation of an angle made by a normal to a surface of said prism with said optical axis of said differential interference optical system, in degrees.

8. (Amended) A differential interference optical system comprising:

an illumination source;

a first polarizing element for converting a ray of light emitted from said illumination source into linearly polarized light;

a first polarizing member for separating said linearly polarized light converted by said first polarizing element into two linearly polarized components which vibrate perpendicular to each other and travel at a slight separation angle;

a lens system for illuminating and observing an object to be observed;

a second polarizing member for combining said two linearly polarized components on an identical path after passing through said lens system; and

a second polarizing element for converting a ray of light combined by said second polarizing member into linearly polarized light,

wherein at least one polarizing member of said first polarizing member and said second polarizing member possesses a position of localized fringes at which said two linearly polarized components intersect with each other, and a distance from said at least one polarizing member to said position of localized fringes is variable, and

wherein one of said first polarizing member and said second polarizing member includes only a first birefringent element with a property of birefringence, separating an incident ray of light into two linearly polarized components vibrating perpendicular to each other and traveling at a slight separation angle, or a combination of said first birefringent element with a second birefringent element which separates an incident ray of light into two linearly polarized components vibrating perpendicular to each other so that said two linearly polarized components emerge in parallel therefrom.

See the attached Appendix for the changes made to effect the above claims.

Please add new claim 25 as follows:

--25. A differential interference optical system according to claim 1, wherein said first polarizing member or said second polarizing member is a Wollaston prism or a Nomarski

prism, and one of said Wollaston prism and said Nomarski prism is constructed to satisfy the following condition:

$$|\Delta\theta| \times d < 12$$

where d is a thickness of said prism, in millimeters, and $\Delta\theta$ is a variation of an angle made by a normal to a surface of said prism with said optical axis of said differential interference optical system, in degrees.--